

REMARKS

Independent claims 1, 10 and 19 have been amended to remove the examiner's rejection under 35 U.S.C. 112, second paragraph.

The prior art patent references to Baun et al. and Yoshimura et al. have been reviewed carefully by the applicants and the undersigned patent attorney. The following remarks are offered to point out why the combination of elements and function of the astronomical observatory system, as described in claims 1-30, are distinguishable over these references.

In independent claim 1, the system is related to an astronomical observatory on an observatory site. The system receives requests from a user interactively or from a script. The requests are made remotely or on site and independent of site personnel. The results and status of the requests are displayed to the user in real time.

The system includes a web browser with means for the user to send the requests to the observatory and receive the status and results of the requests. The web browser also includes a graphical interface for the user which displays status and results.

Also, the system includes a set of astronomical hardware located at the observation site and supplying means for making celestial observations in a digital format, which is transmitted to the web browser and display for the user.

Further, the system includes a web server with means for transmitting and receiving communication to and from the web browser. The web server controls the hardware based on requests from the user via the browser.

On page 1, last paragraph and the bottom of page 2 in the examiner's office action, the examiner states that Baun et al. teaches the operation of an astronomical observatory. Respectfully, this is not true! Baun et al. discloses a portable telescope

system 10 with telescope tube 12 and eye piece 14. A portable telescope is certainly not an astronomical observatory located at a permanent observatory site and including a set of astronomical hardware.

Also, because Baun et al. is a portable telescope, it is subject to set up at different locations. Therefore, a web browser and web server would not be able to provide uninterrupted and continuous communication between the astronomical hardware and different users when requesting results and status in real time.

Further, Baun et al. and Yoshimura et al. don't disclose or teach a web browser having a rich graphical interface with displays of status and results in real time for the user and related to celestial observations.

At the bottom of page 2 and the top of page 3 of the office action, the examiner states that the user of the Yoshimura et al. can manipulate an observatory either remotely or locally in real time and independently of observatory site personnel. This is not true! Yoshimura et al. discloses the use of a remote-controlled, camera-picture broadcast system with a camera controller connected to a camera server via a network. This camera-picture broadcast system has nothing to do with operating astronomical hardware at an observatory site.

Also, Yoshimura et al. discloses video camera transmission via the use of a camera server. This type of system doesn't anticipate the need for "extended" exposure of astronomic images with a shutter staying open for accumulating light from a distant and faint object. Because of this, the Yoshimura et al. system is not capable of capturing celestial objects in real-time with extended exposure.

The above combination of Baun et al. and Yoshimura et al. does not suggest or teach individually or in combination the claimed astronomical observatory system found in claim 1. Claim 1 should be allowed.

Claims 2-9 are dependent on the patentable system of claim 1. On pages 5, 6 and 7, the examiner states that Baun et al. discloses a telescope manager, a telescope driver, a dome manager and a dome driver. This is not true! The cited references don't disclose or teach the use of a web server with a request manager, a power manager, a user manager, a telescope manager, telescope driver a dome manager and a dome driver.

These claims should be allowed.

Independent claim 10 is similar to claim 1 and further includes a telescope with imaging camera located at the observatory site and a web server. The web server includes a request manager, power manager, user database with user manager, a telescope manager, a telescope driver, imaging camera manager and imaging camera driver. The prior art references certainly don't include this combination of elements and function.

The above remarks related to claim 1 also apply to claim 10. Claim 10 should be allowed.

Claims 11-18 are dependent on the patentable features of claim 10. These claims should be allowed.

Independent claim 19 is similar to claim 1 and 10 and further include a celestial object database and celestial object database manager. The above remarks related to claims 1 and 10 also apply to claim 19. Claim 19 should be allowed.

Claims 20-30 are dependent on the patentable combination of structure and function of claim 19. These claims should be allowed.